



## Using Screencasting to Enhance Student Feedback

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## Learning & Teaching Enhancement Fund, Northern Ireland Briefing Paper Template

### Submission date

Please submit the completed briefing paper to [ni@heacademy.ac.uk](mailto:ni@heacademy.ac.uk) within four weeks of project completion and no later than 31 August 2011.

### Aims and Outputs

Please consider the following when completing your briefing paper.

The aims of the briefing paper are to:

- Summarise the key issues which arose during the project, including implications of research / evaluation evidence for practice;
- Stimulate discussion, share practice and support the sector's access to relevant research / evaluation evidence.

The briefing paper is designed to accommodate the following types of projects:

- Those with findings from research or evaluation projects (either completed or in progress) and their implications for practice;
- Those describing the application of research and / or evaluation evidence to practice.

The briefing paper template outlines the basic requirements for the briefing paper and is meant to assist institutions in summarising outputs and also enable a consistent approach across the enhancement funds awarded.

### Dissemination

The paper will be disseminated through the HEA's EvidenceNet site.

**Background information**

|                |   |
|----------------|---|
| Project title: | Using Screencasting to Enhance Student Feedback |
| Institution:   | University of Ulster                            |
| Author:        | David Comiskey                                  |
| Email address: | da.comiskey@ulster.ac.uk                        |

**Abstract:** Please provide a brief abstract of the project delivered (maximum 250 words).

"Students must have routine access to the criteria and standards for the task they need to master; they must have feedback in their attempts to master those tasks, and they must have opportunities to use the feedback. Excellence is attained by such cycles of model-practice-feedback-perform." (Wiggins 1997). Providing effective feedback is important as it helps to engage students and enhance understanding. However, increasing cohort size often results in feedback being provided at too slow a pace and lacking in clarity and detail. This report presents the preliminary findings of a pilot study undertaken at the University of Ulster, focusing on an alternative method of providing feedback, by using screencasting technology to produce short videos. It evaluates the effectiveness of the method from both the student and academics' perspective and gives an insight into the students' reaction to the new technique compared to more traditional feedback modes.

**Rationale:** Please provide background context, such as the research / evidence-informed practice context, which provided impetus for the project.

The study was carried out with Year 2 Architectural Technology & Management students in second semester of the 2010-2011 academic year. They were studying a Computer Aided Design Applications module and were required to create a set of architectural drawings for a given building.

At the beginning of the Semester an informal meeting was held with the students to ascertain their views on effective feedback methods. Traditionally, within the CAD Applications module written feedback was provided to the students. However, discussions highlighted that this method was not valued in modules where new software was being learnt. Students commented that with the vast content to be covered in such modules, by the time feedback was received the topic had progressed. The feedback therefore couldn't be used in a productive manner to impact upon future submissions.

Suggestions were aired that at times written feedback was not specific enough and lecturers were not always available to answer queries or clarify certain issues. The above comments support the suggestions of Brown and Glover (2006) who, after interviewing 112 students found that they did not "act on (written) feedback to improve their work", as "the topics studied had moved on." A further comment regarding traditional feedback methods was that whilst the information was useful when it was received, after a short period of time students tended to have forgotten the lecturers remarks or had mislaid the written comments received. The result of the discussions suggested that feedback should ideally be delivered in a format that could be viewed repeatedly.

In the same module in the 2009-10 academic year, the author had carried out a pilot study which utilised video and screencasting resources to assist with learning and teaching. "Screencasting involves recording the computer screen, along with a voice narration, to create an online video which captures exactly the actions of the computer user. Rather than present students with static images or screenshots of a computer application, screencasting enables the user to produce exact replications of any computer sequence. In this way, the viewer sees exactly where the mouse clicks on-screen, or where to add text or data to a programme, or where to go online to view related materials and resources." Comiskey & McCartan (2011)

Videos were created using screencasting software which contained demonstrations on how to use the software to create various building components. The feedback from the pilot study was extremely positive and showed that 96% of the class had indicated that they would like to see such resources more widely used in similar modules. Comments from the students highlighted the videos as being accessible and they praised the ability to pause and rewind. Other positive comments such as "clarity" and "no confusion" indicated that this medium could potentially be effective for producing meaningful

feedback. As a result of the meeting with the students it was decided to use video and screencasting as a feedback method in the 2010/11 academic year.

The aim of the study was to provide the students with effective and useful feedback in an appealing medium which in turn could be used to enhance future work.

**Generation of Evidence:** Please describe how the research / evaluation findings were generated, e.g. methods used.

In week one of the semester the students were issued with their first assignment brief. The task was to produce a set of architectural plans using Revit Architecture for a hypothetical sports museum. The cohort worked on this submission both in class and at home and it was submitted electronically to the lecturer in week eight. The students were divided into two groups for the purposes of feedback, after the first submission half of the students received written feedback with the others receiving a short video produced using Camtasia Screencasting Software.

The second assignment was due in week twelve and required the students to produce three dimensional perspective presentation drawings for their chosen design. For this submission the feedback methods were reversed and the students received their feedback in the alternative format. This process allowed for a better evaluation of the students understanding of the feedback procedure. The use of screencasting software allowed the lecturer to view the students work on screen whilst talking them through the assessment criteria, highlighting the positive aspects whilst offering advice on elements which could be improved upon. The video was then produced and e-mailed to the students via their University email account.

A focus group was set up to allow the students to give direct feedback after the first coursework submission was returned. This allowed the group to offer their views on what they felt were the positives and negatives from both methods. This discussion was used to shape the feedback given for the second submission. A Feedback evaluation form was given to the students for both submissions. This form captured information on their preferred feedback method and what they thought was good, or could be improved upon. A lecturers diary was used to capture thoughts and feelings as the semester progressed.

**Related key terms and concepts:** Please list up to five key words which closely describe the topic of the project. These will facilitate search functionality used by the HEA's EvidenceNet services.

Screencasting, Feedback, E-Learning

**Existing Evidence:** Please provide details of research / evaluation evidence drawn on and reported on in the project.

Although there is an abundance of information on screencasting available online and it is being used in many academic institutions, formal studies on its effectiveness, especially as a feedback method are difficult to come across. However, the benefits of screencasting have been documented by authors such as Trail & Hadley (2010) and Selvester, Mulholland, and Wong (2006)

**Research findings / New evidence:** Please describe any new findings or evidence reported on in the project.

Upon receipt of the feedback using screencasting, students were asked to complete an evaluation form. Of the 44 students enrolled on the module 39 responded, which equates to a response rate of 89%. In terms of feedback preference, 72% of the respondents stated that they favoured video feedback, 20% were ambivalent and only 8% favoured the more traditional written feedback method. When asked if they would like future feedback delivered in this way, 92% responded that they would, with 8% responding negatively.

To gain a better understanding of the students' views on video feedback further questions were asked and a likert type scale was used to record responses. Students were asked if they thought the video feedback file was easy to access and the content easy to understand. 95% of the respondents either agreed or strongly agreed. A question was asked to ascertain if the length of the video feedback was adequate. 90% stated that they felt the length of the video feedback file was satisfactory, 5% were ambivalent, with a further 5% feeling that the videos could have been longer in duration. 100% of respondents either agreed or strongly agreed that the level of the feedback in the videos was just right.

The students were also asked some open ended questions on the evaluation form and given space to record their views. In terms of what they liked most about the video feedback, the main response was that the ability to view the feedback over and over again was seen as very beneficial. It gave students flexibility to see where they were making mistakes in their own time and learn from it for future submissions. Some key comments included:

*"I liked the flexibility. You can look back over it to grasp it completely"*

*"I preferred video as you could see where marks had been lost and how this could be improved in future"*

*"Video was great help... being shown exactly where I could improve has really helped."*

*"The feedback was given very quickly. In many cases in other modules you just get marks back and you don't get the chance to see where you went wrong!"*

*"Video feedback is a lot quicker and means that I can go back to review it anytime whereas with lecturers being very busy this is not always possible for a face to face consultation."*

*"Given the nature of the information I could not find any faults at all and would greatly recommend this for future projects and coursework."*

*"The feedback information is conveyed whilst the submission file is being viewed which makes it easier to understand which elements of the submission the feedback is relative to."*

In terms of what the students didn't like about the video feedback, some stated that being unable to ask questions if unsure about an element was a major disadvantage. This was also brought up at the focus group and was addressed by setting up an in class session where the students could clarify any issues which were concerning them. One of the students commented that the thing they least liked about the video feedback was that "You could see your mistakes very clearly". From a lecturers perspective this would be viewed as a positive comment as it highlights areas from which the students can learn. There were a number of general remarks on technical issues such as poor sound quality on some of the videos and problems accessing the videos. Some of the key comments included:

*"[The videos were] quite short and obviously you don't have the option to ask questions"*

*"The sound quality could be improved"*

*"It was like a one sided conversation I would at times prefer a discussion with the lecturer about feedback"*

Finally, the students were asked their views on what improvements could be made to enhance the video feedback method. Suggestions were made that as much focus should be put on positive feedback as well as highlighting areas in which they could improve. This was an interesting observation and further discussion with those in the focus group suggested that positive feedback followed by recommendations/improvements and a positive ending would be the ideal format. The group felt that this was the best way of delivering useful feedback to students whilst encouraging and recognising the good work produced.

There were numerous positive comments recorded, the main one being that feedback could be received remotely, more specifically at home over holiday periods. Traditionally, the first coursework submission for the module was due before the Easter break; therefore feedback would not be received by the students until they returned to University. During this period students would be working on the second coursework submission for the module, so when they did receive the feedback it was too late to have any impact on the upcoming submission. Other useful suggestions included the request that videos be produced in a format allowing them to be downloaded to mobile phones, especially iPhones. The Camtasia Software used allows the videos to be produced in this format and it is a suggestion which will be taken on board for the next academic year.

**Outcomes of research / evaluation evidence and the implications for policy and practice:** Please identify any application or outcomes of research / evaluation evidence and details the implications for policy and practice for different stakeholder groups such as: academics, learning technology practitioners, professional developers, senior managers, policy makers, students, sector organizations, employers and professional bodies. Please also use this section to reflect on any lessons learnt and potential of the project's transferability (eg. to other disciplinary areas).

The pilot project has demonstrated that feedback given in this medium does appeal to students. As everyone has different learning styles, no feedback method will appeal fully to all learners, but the overwhelming feeling from this study was that feedback delivered in this medium, accompanied by a follow on question and answer session would be embraced by the vast majority of students.

In terms of the benefits for academics, this delivery method has the potential to drastically reduce the amount of time taken to produce detailed feedback. In this study, the average time taken to record and produce the videos was around 5 minutes. It was kept to this length as a result of listening to the views of the focus group, with the feeling that a video over 5 minutes in length would lose students' attention. This compares to an average of 8 minutes per student to produce the written feedback. The study found that it was more time consuming to view the students work on screen, then record written feedback rather than producing an audio recording whilst viewing the work on screen.

This would be particularly advantageous when giving feedback to large cohorts, as there is the potential for substantial time savings. In the Architectural Technology profession, feedback in this medium closely mirrors what would be encountered in practice and therefore would be advantageous from a professional perspective. Practitioners are constantly reviewing work produced and offering comments and suggested improvements.

**Impact:** Please describe the impact of the project including any evidence collected, if possible.

The findings from the project suggest that the ideal feedback method would be sitting down with students on an individual basis giving one to one feedback. Increasing class sizes and the many time constraints lecturers are faced with mean that this is not always possible or indeed practical, and thus video feedback could be seen as a viable alternative in preparing students for professional life.

"Changing student demographics have led to an increased number of part-time students and students who live at home and commute to university" (Parson et al, 2009 cited by Comiskey & McCartan 2011). This feedback medium would prove beneficial to distance learners as it could be viewed remotely, without the need to physically visit the University building. This medium has the potential to give a more personal approach to the feedback process, more so than sending out written feedback with general comments. This view was echoed by one of the students in this study who commented "I liked the way the feedback was personalised, it felt like the lecturer was speaking to and encouraging me rather than giving general feedback to the entire group"

Although this project has in the first instance, concentrated on Architectural Technology students there is the potential that it could be rolled out to other courses within the Built Environment sector that use similar software on their courses. Indeed, this feedback medium could be useful in numerous disciplines as there are advantages for both the students and the academics. It allows detailed and personalised feedback to be given in a way that appeals to students and more importantly students recognise that feedback has been received and make appropriate efforts to improve.

**Links:** Please use this box to include any links to resources.

n/a

**Bibliography / references (preferably annotated):** Please list any references mentioned in or associated with the seminar topic. Where possible, please annotate the list to enable readers to identify the most relevant materials.

Brown, E. & Glover, C. (2006) Evaluating written feedback on students' assignments. In Innovative Assessment in Higher Education, Eds Bryan, C. & Clegg, K., pp.81-91. Oxfordshire, UK. Routledge Taylor & Francis

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